



Public Safety Wireless Network

Saving Lives and Property Through Improved Interoperability

July 8, 2002

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
12th St. Lobby, TW-A325
Washington, DC 20554

Re: Response to the Commission's Request for Comments on Spectrum Policy, *In the Matter of Spectrum Policy Task Force Seeks Public Comment on Issues Related to the Commission's Spectrum Policies*, ET Docket No. 02-135

Dear Ms. Dortch:

On behalf of the Public Safety Wireless Network (PSWN) Program and pursuant to Section 1.51 of the Commission's Rules, 47 C.F.R. § 1.51 (2000), enclosed herewith for filing are an original and four (4) copies of the PSWN Program's Comments in the above-referenced proceeding.

Kindly date-stamp and return the additional, marked copy of this cover letter and filing to the person delivering it.

Should you require any additional information, please contact the undersigned.

Respectfully submitted,

Handwritten signature of Paul H. Wieck II.

Brigadier General Paul H. Wieck II
Iowa Army National Guard
Chair, PSWN Executive Committee
Spectrum Working Group

Handwritten signature of Steven Proctor.

Steven Proctor
Executive Director,
Utah Communications Agency Network
Executive Vice-Chair,
PSWN Executive Committee

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OFFICE OF THE SECRETARY

In the Matter of)
Spectrum Policy Task Force Seeks Public)
Comment on Issues Related to Commission's)
Spectrum Policies)

DA 02-1311
ET Docket No. 02-135

To: The Commission

**RESPONSE TO THE COMMISSION'S REQUEST FOR COMMENTS
ON SPECTRUM POLICY**

Filed by: The Public Safety Wireless Network Program

Date: July 8, 2002

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EXECUTIVE SUMMARY

On June 6, 2002, the Commission released Public Notice DA 02-1311, announcing the formation of the Spectrum Policy Task Force and requesting comments on a number of issues. The topics of this inquiry included market-oriented allocation and assignment policies, interference protection, spectral efficiency, public safety communications, and international issues. Many of these topics touch on concerns that address the public safety community and that should be studied in depth. The Public Safety Wireless Network (PSWN) Program is pleased to offer its observations and recommendations with respect to the various items identified by the Commission for consideration in this new proceeding.

The PSWN Program advocates adoption of market-oriented allocation policies by the Commission, with the caveat that such policies and procedures must observe the overriding priorities associated with spectral use for the purposes of public safety and national security. Any cohesive plan presented by the Commission must focus on these requirements and guarantee their protection before addressing commercial and experimental applications and uses. The Commission should involve representatives of all user groups, including government, commercial mobile radio services, specialized mobile radio services, business and industrial and land transportation, utilities, equipment manufacturers, infrastructure providers, and others, when addressing the needs and opportunities for improvement in current spectrum management schemes.

The PSWN Program also submits that the Commission must continue to protect both incumbents and new users from interference. Compliance with the Commission's Rules must be

vigorously enforced and best practices encouraged. The Commission should also continue to reward those who develop methods that improve efficient use of spectrum and provide opportunities for innovators to develop new technologies and applications that use spectral resources most efficiently. The Commission should provide incentives to those parties who strive to use spectrum productively and enable other users to optimize spectrum capacity through the observation of best practices, open standards, and the development of innovative applications. The PSWN Program recommends that the Commission should also permit flexible licensing policies to encourage more efficient use of spectrum where safe and appropriate.

Finally, the PSWN Program again urges the Commission to continue to adopt policies that promote interoperable public safety communications and that empower those agencies entrusted with the preservation of life and property by supplying them with the tools they need to accomplish that mission. To meet the new challenges that confront public safety and national security, systems and coverage must be integrated to allow for the sharing of information via enhanced communications capabilities. The PSWN Program looks forward to continuing this dialog with the Commission, and advancing this initiative.

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of)	
)	DA 02-1311
Spectrum Policy Task Force Seeks Public)	ET Docket No. 02-135
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Spectrum Policies)	

To: The Commission

**RESPONSE TO THE COMMISSION'S REQUEST FOR COMMENTS
ON SPECTRUM POLICY**

1. The Public Safety Wireless Network (PSWN) Program¹ Executive Committee (EC) respectfully submits these comments to the Federal Communications Commission (Commission) in response to the announcement of June 6, 2002, establishing the Spectrum Policy Task Force.² The Commission sought comments from interested parties regarding specific issues contained in the Public Notice that concern the Commission's spectrum policy.

I. INTRODUCTION

2. The Commission has indicated that the Spectrum Policy Task Force will review submitted comments, conduct workshops, and issue a report containing its findings to the

¹ The PSWN Program is a federally funded initiative operating on behalf of all local, state, federal, and tribal public safety agencies. The Department of Justice and the Department of the Treasury are jointly leading the PSWN Program's efforts to plan and foster interoperability among public safety wireless networks. The PSWN Program is a 10-year initiative that is an effort to ensure that no man, woman, or child loses his or her life because public safety officials cannot talk to one another.

² Public Notice, *Spectrum Policy Task Force Seeks Public Comment on Issues Related to Commission's Spectrum Policies*, DA 02-1311, rel. June 6, 2002.

Commission in October 2002. The Commission identified a number of policy areas for consideration in advancing its objectives and offered an ambitious schedule to acquire relevant information and summarize its findings. The PSWN Program makes the following observations and comments regarding only those issues that directly impact Commission policies affecting the ability of the local, state, and tribal public safety communities' efforts to improve communications, apply new technology to expand capabilities, and achieve interoperability.

II. DISCUSSION

A. Market-Oriented Allocation and Assignment Policies

3. In response to the Commission's **Question 1**, the PSWN Program suggests developing, adopting, or approving the following policies to improve current spectrum allocation processes—

- Develop a national strategic plan for spectrum use in cooperation with government and commercial sources. At a minimum, this plan should address national requirements for spectrum and current and expected availability of this resource, anticipate new options in the management and use of spectrum, and establish database management processes. The strategic plan and an accurate database of current spectrum use could support risk analysis and mitigation planning regarding additional spectrum requirements and allow commercial and private spectrum users and equipment manufacturers to explore market-based initiatives that harmonize current and future requirements in support of national interests.³

³ See, e.g., In the Matter of VoiceStream Petition for Waiver of Section 64.402 of the Commission's Rules, WT Docket No. 01-333; In the Matter of Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102.

- Establish and incorporate anticipated public safety requirements into the overall spectrum management process if the Commission continues with a market-oriented approach. In this scenario, Commission would be more proactive and flexible in satisfying current or projected market needs for spectrum availability, efficiency, and use.
- Approve policies and generate incentives to encourage the concept of secondary markets for spectrum use. The Commission has instituted rulemaking proceedings for proposed secondary markets rules⁴ that would permit licensees to “lease” their spectrum to others. These policies and incentives would expand opportunities for service by permitting more efficient use and allocation of spectrum. This concept could also lead to the trading of spectrum rights among parties⁵ on an “as needed” basis. Critical infrastructure services and secondary markets could benefit from this regulatory environment. At the same time, the Commission must ensure that flexible use policies would not negatively impact public safety communications systems. The National Telecommunications and Information Administration (NTIA) has noted with approval that the Commission’s initiative to encourage secondary markets was met with unanimous support.⁶
- Provide incentives for the use of new frequency flexible systems, such as spread spectrum and ultra wideband (UWB) technology⁷ for wireless local area networks,

⁴ See Promoting Efficient Use of Spectrum Through Elimination of Barriers to Development of Secondary Markets, WT Docket No. 00-230, Notice of Proposed Rulemaking (*NPRM*), 15 Rcd. 24203, November 27, 2000.

⁵ *Id.*, at para. 3.

⁶ Ex Parte Letter to Chairman Michael K. Powell, Federal Communications Commission, re: *NPRM*, WT Docket No. 00-230, March 11, 2001, at p. 2.

⁷ In the Matter of Revision of Part 15 of the Commission’s Rules Regarding Ultrawideband Transmission Systems, ET Docket No. 98-153, First Report and Order (*First R&O*), rel. April 22, 2002 (*UWB Rulemaking*).

wireless Internet access, and other uses; software defined radio (SDR) technology;⁸ and low power technologies⁹ on an unlicensed basis. This action would improve the current block allocation structure and accommodate new users and applications while streamlining regulatory burdens for the Commission, as well as for industry.¹⁰ As stated previously, the Commission would have to enforce a “Zero Tolerance” rule to ensure that new applications and emerging technologies did not create harmful interference to public safety communications.

- Approve spectrum policies that alleviate the current congestion below 3 gigahertz (GHz) with monetary incentives such as a reduction or waiver of licensing fees for relocation to higher bands, where possible, to allow more efficient use of this highly contested spectrum.¹¹
- Incorporate flexibility for new and existing spectrum-efficient systems, to simplify guidance and procedures, and use them within constraints that protect broader national interests (such as the Homeland Security program). Review licensees applying for renewal to determine whether they are incorporating the latest available technology for the most efficient use of the spectrum.

4. In response to the Commission’s **Question 2**, the PSWN Program concurs that current,

⁸ In the Matter of Authorization and Use of Software Defined Radios, First R&O, ET Docket No. 00-47, rel. September 14, 2001 (*SDR Rulemaking*).

⁹ See PSWN Program Ex Parte Comments, In the Matter of Reallocation of the 216–220 Megahertz (MHz), 1390–1395 MHz, 1427–1429 MHz, 1429–1432 MHz, 1432–1435 MHz, 1670–1675 MHz, and 2385–2390 MHz Government Transfer Bands), ET Docket No. 00-221, July 30, 2001, at para. 8.

¹⁰ See SDR Rulemaking at para. 1.

¹¹ See In the Matter of Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, rel. January 5, 2001.

restrictive service and operating rules should be changed to provide licensees with greater freedom to operate.¹² The PSWN Program suggests that licensees should be given flexibility and allowed to independently manage within their spectrum as long as they do not cause interference. As an example, the Commission should encourage “flexible use” applications by licensed users in secondary market scenarios; however, measures must be developed to promote efficient use of spectrum. The PSWN Program also notes that proceeds derived from spectrum-related market activities could be directly applied to appropriate spectrum-based initiatives and other necessary duties such as enforcement.

5. The development and maintenance of an accurate, real-time national database that lists current spectrum licenses and use should be part of a national strategic plan on spectrum use. Adoption of this approach offers potential for improving overall spectrum efficiency and simplifying coordination and sharing, while protecting the rights and access of the primary users from interference and interruption of service. A national spectrum database would be of particular value in areas where spectrum demand is highest (e.g., New York or Los Angeles) and could assist frequency coordinators in providing guidance for establishing boundaries for usage and for rendering decisive judgements in support of users experiencing interference and other problems. Although the Commission denied previous recommendations by public safety entities¹³ to mandate a pre-coordination database in the 700 megahertz (MHz) band in a prior

¹² See, e.g., FCC News Release re: NPRM, FCC 02-180, June 13, 2002, which described the rulemaking proceeding as an effort by the Commission “to examine methods to promote the commercial development and growth of spectrum in the 71–76 GHz, 81–86 GHz and 92–95 GHz bands.” *Id.*

¹³ See PSWN Program Petition for Reconsideration (*PSWN PFR*) of the Commission’s Fourth R&O, In the Matter of the Development of Operational, Technical, and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010 (*700 MHz Band Public Safety Requirements*), WT Docket No. 96-86, March 19, 2001, at paras. 3–6; see also John S. Powell, Petition For Reconsideration, 700 MHz Band Public Safety Requirements, March 19, 2001, paras. 8–13.

rulemaking,¹⁴ the PSWN Program is optimistic that the Commission may have reconsidered that this proposal “had merit and could be used as an effective planning tool”¹⁵ to analyze usage and resolve conflicts. To facilitate efficient restructuring of spectrum held by new licensees and incumbents and because the metrics are not well known, the PSWN Program recommends that the Commission’s Spectrum Policy Task Force should specifically study and participate in this endeavor.

6. In response to the Commission’s **Question 3**, the PSWN Program agrees that the spectrum policy should differ for each portion of spectrum and between different geographic areas. For example, greater limitations may need to be imposed on spectrum use in congested geographic areas and congested portions of the spectrum (e.g., below 3 GHz and/or in metropolitan areas). Spectrum allocation and licensing policies should be assessed periodically and updated to ensure they meet the needs of all users, including those in rural areas. Congestion and demand can be accurately measured and estimated using a model similar to that used by the Public Safety Wireless Advisory Committee (PSWAC) for predicting spectrum requirements.¹⁶ In 1996, the PSWAC submitted its final report that thoroughly analyzed the state of public safety wireless capabilities. The PSWAC Report recommended in 1996 that an additional 97.5 MHz of spectrum was necessary to support public safety communications operations through 2010.¹⁷ The PSWN Program observes that the measurement of spectral use, congestion, and demand will require further study. The Spectrum Policy Task Force could analyze this information, as well,

¹⁴ 700 MHz Band Public Safety Requirements, Fourth Memorandum Opinion and Order (*Fourth MO&O*), at para. 9.

¹⁵ *Id.*, at para. 7.

¹⁶ See generally Public Safety Wireless Advisory Committee (PSWAC) Final Report (PSWAC Report), September 11, 1996, pp. 54–61. For specific assumptions with respect to the predictive model developed by the Spectrum Requirements Subcommittee, see paras. 4.4.2–4.4.10, and Table 4-4-1, pp. 54–57. *Id.*

¹⁷ *Id.*

and make recommendations based on evaluation of trends and the deployment of emerging spectrally efficient technology. The Spectrum Policy Task Force should be encouraged to consult with State Interoperability Executive Committees in examining spectrum requirements and usage by public safety communications entities.

7. In response to the Commission's **Question 4**, the PSWN Program respectfully asserts that prior to the adoption of more market-oriented allocation and assignment policies, the Spectrum Policy Task Force must first preserve the hard-won spectrum that has been identified for use in support of critical national safety, security, and public welfare interests. The public safety community cannot and will never effectively compete within a market environment. At the direction of the Congress, the Commission exempted public safety communications from the spectrum auction process and recognized the priority that should be placed on allocating the spectrum necessary for those purposes.¹⁸ Spectral protection and assurance, including an exemption from competitive bidding at spectrum auctions, must be afforded to maintain required levels of appropriate spectrum access and reliability necessary for public safety agencies to support operational requirements. Without this protection and assurance, the optimal provision of wireless services for public safety and public service entities would be hindered by more market-oriented spectrum policies. Market failures, resulting from commercial underdevelopment, that allow inefficient utilization of bands compatible with public safety applications and that remain unoccupied or are only used intermittently, should be avoided. In light of the events of September 11, 2001, and the growing responsibilities of the Office of Homeland Security, the Commission's renewed focus on public safety and national security

¹⁸ 47 U.S.C. 309 (j)(2)(A), effective July 1, 1997.

initiatives must continue to unequivocally affirm that the allocation of spectrum for these purposes takes precedence over any other uses.

8. In response to the Commission's **Question 5**, the PSWN Program supports identification of additional spectrum for the operation of unlicensed devices, consistent with the precautions expressed previously. The Commission should also consider permitting experimental and temporary licensing to take advantage of the benefits of this technology,¹⁹ with the understanding that public safety communications cannot be compromised, even in a limited manner.

Appropriate precautions must be taken to ensure that emerging technologies and applications will not cause interference to existing licensed services.²⁰ The PSWN Program has advocated adoption of new technologies in prior rulemakings. For instance, in ET Docket No. 00-47, the PSWN Program cautiously endorsed further study of SDR technology as a possible solution for interoperability issues.²¹ Likewise, the PSWN Program further notes that the Federal Law Enforcement Wireless Users Group (FLEWUG) has also recommended the adoption of UWB technology "concerning the potential of new and emerging technologies substantially enhance the roles of its constituency, and of public safety providers at all levels of government."²²

9. In response to the Commission's **Question 6**, the PSWN Program recommends the identification and promotion of opportunities for experimental and emerging spectrum-based technologies and demonstrations of their usefulness through controlled projects and public

¹⁹ See First R&O, UWB Rulemaking at para. 19, FN 38.

²⁰ *Id.*, at paras. 5, 18.

²¹ PSWN Program Reply Comments In Response to the Comments Filed by Other Parties Regarding the Commission's Notice of Inquiry, SDR Rulemaking, at para. 9.

²² FLEWUG Comments to the NTIA's Assessment of Compatibility Between Ultra-Wideband Devices and Selected Federal Systems, UWB Rulemaking, February 23, 2001, at para. 2.

reports on the findings (e.g., successes, failures, and lessons learned).²³ The Commission can provide incentives for developers, such as the waiver of licensing fees and other advantageous treatment, to promote innovative technology and should continue to encourage open standards for widespread compatibility upon eventual deployment.

B. Interference Protection

10. In response to the Commission's **Question 7**, the PSWN Program asserts that new definitions of "interference" and "harmful interference" are not necessary.

11. In response to the Commission's **Question 8**, the PSWN Program reiterates that the current definitions of "interference" and "harmful interference" require no change.

12. In response to the Commission's **Question 9**, the PSWN Program supports more explicit protections from harmful interference.²⁴ The PSWN Program adds that a methodology for balancing cost-effective models with output and receiver protection for maximum efficiency and utility is needed. The Commission's Rules should ensure that incumbent users are protected from harmful interference.

13. In response to the Commission's **Question 10**, the PSWN Program asserts that power limits on spectral use and coordination procedures conducted by experienced, objective

²³ See NPRM, UWB Rulemaking, rel. May 1, 2000, at para. 1.

²⁴ See, PSWN Program Petition for Reconsideration of the Commission's Second Memorandum Opinion and Order (MO&O), 11; cf. PSWN Program Comments, Improving Public Safety Communications in the 800 MHz Band, Consolidating the 900 MHz Industrial/Land Transportation Business Pools (800 MHz NPRM), WT Docket No. 02-55, May 3, 2002, at paras. 28-30, 32.

frequency coordinators are critical. The PSWN Program also suggests that the Commission should adopt additional measures as necessary, such as guard bands and equipment standards,²⁵ to ensure public safety communications receive absolute protection and other users do not compromise the integrity of these operations.²⁶ The experience and lessons learned in resolving incidents of interference on the 800 MHz band should provide valuable insights for the Commission and for public safety users, so they can take the necessary precautions to prevent similar occurrences from taking place on other bands in the future.

14. In response to the Commission's **Question 12**, the PSWN Program disagrees that the definition of harmful interference should evolve as technology does. Specifically, the definition of "harmful interference," which is defined by clear and objective criteria, should remain the same. Those interests seeking to develop new technology applications must continue to consider current practices, established regulatory standards, and the potential impact of proposed innovations on all spectrum users.

15. In response to the Commission's **Question 13**, the PSWN Program does not support a separate definition of rights for new spectrum users that would differ from those of the present incumbents. The Commission's current policies with respect to interference, equitably enforced, should preserve, and protect the rights of both new and incumbent users.

²⁵ *Id.*, at paras. 28–29, 32. See also FLEWUG, In the Matter of Petition for Rulemaking To Promote Interoperability and Efficient Use of Allotted Spectrum for Public Safety Agencies and Other Measures to Address Communications Needs Through the Year 2010 (*FLEWUG Petition*), RM-10432, December 7, 2001, paras. 20–22.

²⁶ *Id.*, at para. 18–20.

16. In response to the Commission's **Question 14**, the PSWN Program continues to strongly support the incorporation of the receiver standards to eliminate harmful interference.²⁷ Receiver standards provide common values that all equipment manufacturers would be obliged to meet, and uniformly protect receivers from being affected by harmful interference. The Commission should consider developing receiver standards or guidelines for each radio service; however, these standards must ensure that all users will be protected from harmful interference.

17. In response to the Commission's **Question 16**, the PSWN Program opposes adopting rules for interference based on economics. Rules for interference should be based on clearly defined technical criteria, uniformly applied under the Commission's Rules. Economic evaluation would allow the highest bidder to use spectrum in any way desired and would create a "right" to cause interference, which cannot and should not be for sale. In addition, the PSWN Program notes that equitable administration of spectrum based on economics, while still honoring the Commission's commitment to confer all necessary resources for public safety communications requirements, would be complicated and fraught with inconsistency.

C. Spectral Efficiency

18. In response to the Commission's **Question 17**, the PSWN Program submits the following policies or mechanisms to be considered as a means of promoting spectral efficiency—

- The increased use of spectrum-efficient technologies. The program recommends that the Commission mandate use of new technologies that promote spectrum efficiency.

²⁷ See PSWN Program Comments, 800 MHz NPRM at paras. 28–29, referencing the ANSI Grade A receiver standard endorsed by the Public Safety National Coordination Committee (NCC), and Telecommunications Industries Association/Electronic Industries Alliance receiver standards.

- Technical standards, such as Project 25 or another American National Standards Institute (ANSI) approved standard, should be developed to minimize interference and increase overall spectrum efficiency. In addition, technical standards help to promote crucial public safety interoperability. System spectral efficiencies should be measured and reported on a routine basis, such as during every other license renewal, and used as a basis for obtaining a frequency license and/or determining the cost of license renewal. The spectral efficiency of the user applications could be measured against the most efficient technology commonly available on the market that is associated with the specific service/application under review. The ratio of the level of efficiency of an optimal achievable level and the efficiency level being maintained by that specific spectral user would act as a “grade” on the user’s efficient use of the Nation’s spectrum.

19. In response to the Commission’s **Question 19**, the PSWN Program suggests innovative new technologies, including those using adaptive frequency, power, and antenna capabilities, hold great promise in improving spectral efficiency. Frequency adaptive technologies, such as SDR, and spread spectrum and UWB technologies will permit more efficient use of spectrum. Ground-penetrating radar and other new UWB technology, such as surveillance systems, wall and through-wall imaging systems, and medical systems, also create tremendous possibilities for the enhancement of public safety and safety of life operations. However, these breakthrough applications should not be deployed indiscriminately and must be carefully regulated by the Commission, based on solid, objective data.

20. In response to the Commission's **Question 20**, the PSWN Program recommends that the Commission undertake further study to determine what criteria are necessary to evaluate spectral efficiency. The PSWN Program asserts that common factors, such as frequency and volume of spectrum use, should be examined, and that opportunities for carrying out operations by use of emerging technologies bear further investigation.

21. In response to the Commission's **Question 21**, the PSWN Program concurs with the practice of encouraging the use of spectrally efficient new technologies on an unlicensed basis²⁸ to improve spectral efficiency. The PSWN Program notes the Commission's approach to the introduction of unlicensed UWB represents an admirable demonstration of balancing the need for protection from interference with the introduction of new and useful applications.²⁹ Regulation of unlicensed applications under Part 15 of the Commission's Rules must remain stringent to make certain that the technologies being introduced cannot interfere with public safety communications operations under any circumstances. As the Commission noted, as more data about the technology becomes available, regulations could be revised later in the rulemaking process if lesser restrictions on emissions are proven safe to public safety and other incumbent users.³⁰

D. Public Safety Communications

22. In response to the Commission's **Question 22**, the PSWN Program suggests that the Commission offer an expedited review and approval process for the evaluation of new

²⁸ See First R&O, UWB Rulemaking, at paras. 18–19.

²⁹ *Id.*

³⁰ *Id.* at para. 21.

technologies and applications developed by manufacturers to provide enhanced interoperability and cost efficiency. By fast tracking successful applications for deployment, the Commission will provide greater utility and costs savings for public safety users. In addition, as is noted throughout these comments, any process must give full consideration to ensuring that proposed technologies and applications remain fully compliant with the Commission's stringent regulation to prevent any harmful interference to public safety communications. Manufacturers of this equipment will also reap the benefits of having this equipment available for demonstration and sale to users upgrading and replacing equipment that has become obsolete.

23. At the same time, the continued promotion of open standards, such as the Project 25 suite of standards endorsed by the PSWN Program for adoption in the 700 MHz band,³¹ is crucial in realizing the objective of cost efficiency, as well as popularizing innovative technology. The Commission has already embraced co-equal access for federal agencies to interoperate with local, state, and tribal public safety agencies in the 700 MHz band.³² The Commission should expand upon this policy, as well as explore new incentives to induce cooperation among manufacturers to provide a better and more reliable product.

24. In addition, the PSWN Program recommends the development of a Public Safety Task Force, composed of members of the public safety community, manufacturers, government

³¹ See PSWN Program Reply Comments, Fifth NPRM, 700 MHz Band Public Safety Requirements, WT 96-86, April 3, 2001, at para. 4.

³² See Third R&O, 700 MHz Band Public Safety Requirements, rel. October 10, 2000, at para. 65, FN 201.

agencies and volunteers, as well as commercial service providers, to best assess the emerging applications, technologies, and spectrum needs. All stakeholders in the field of wireless communications must work together to provide solutions for linking local, state, federal, and tribal public safety agencies with national defense, intelligence, emergency, and other critical services to meet the needs of Homeland Security, as well as more conventional, day-to-day responsibilities. Enhanced protection must be established for critical infrastructure industries, such as power, water, and other essential services, and incorporated into an organized communications network. This effort will demand adoption of new methodologies, policies, and procedures, and the dedication and cooperation of all those involved.

25. In response to the Commission's **Question 23**, with respect to the adoption of novel spectrum sharing mechanisms, the PSWN Program recognizes the vast potential of sharing agreements for the efficient use of spectrum, especially in emergency situations, when communications are imperative to safety of lives and property. The PSWN Program specifically requests that the Commission study the possibilities for sharing of spectrum and related practices that can provide access to resources and technology in mission-critical situations. The Commission should work together with the NTIA to analyze feasible means of accomplishing this initiative and work closely with commercial and private radio services to develop a plan that can be readily implemented when timing is critical. The Commission should also appoint a Federal Advisory Committee, similar to the NCC, and give that body a mandate to evaluate and recommend policy for all bands of the spectrum to maximize efficiency and promote innovation.

26. In response to the Commission's **Question 24**, the PSWN Program suggests that until more current analyses can be completed by the Spectrum Policy Task Force, the Commission should continue to use the PSWAC Report as its baseline to determine how much spectrum is required for public safety communications³³ and to explore how such a determination can be prepared.³⁴

III. CONCLUSION

27. The PSWN Program supports the Commission's bold initiative to revise the current spectrum management processes that guide the non-government wireless services and to institute more flexible procedures to reflect advances in technology and opportunities for expansion of applications and markets. The PSWN Program reemphasizes the importance of this work and cautions against adopting regulations and policies without the conclusive support of thorough technical studies. To fully address the many important issues that are introduced on this docket will require an unprecedented reorganization of resources and the ability to assess not only the best solutions for the near term but also the long-term implications of a unified communications plan.

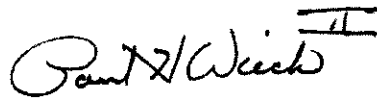
28. The PSWN Program commends the efforts of all parties that have participated in this docket and respectfully requests that the Commission considers the concerns and recommendations submitted with respect to this docket. The PSWN Program welcomes the opportunity to continue participating in this inquiry and asks the Commission to proceed

³³ See PSWN Program Comments, 800 MHz NPRM, at para. 36.

³⁴ See PSWAC Report, pp. 54-61.

carefully and deliberately in this proceeding. The Commission must take sufficient time to ascertain the impact of proposed measures and thereby avoid costly trial and error. There is very little margin for risk when interference, interruption of service, or compromise of quality can mean disaster in circumstances where safety-of-life is involved. The Commission has taken the initiative to accomplish the task ahead, and the public safety community will continue to render its support to meet this challenge.

Respectfully submitted,

A handwritten signature in black ink, reading "Paul H. Wieck II". The signature is written in a cursive style with a horizontal line underneath.

Brigadier General Paul H. Wieck II
Iowa Army National Guard
Chair, PSWN Executive Committee
Spectrum Working Group

A handwritten signature in black ink, reading "Steven Proctor". The signature is written in a cursive style with a horizontal line underneath.

Steven Proctor
Executive Director,
Utah Communications Agency Network
Executive Vice-Chair,
PSWN Executive Committee


Before the
Federal Communications Commission
Washington, DC 20554

Certificate of Service

In the Matter of)	
)	DA 02-1311
Spectrum Policy Task Force Seeks Public)	ET Docket No. 02-135
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Spectrum Policies)	

I, Richard N. Allen, Senior Associate, Booz Allen Hamilton, 8283 Greensboro Drive, McLean, Virginia, 22102-3838, hereby certify that on this date I caused to be served, by first-class mail, postage prepaid (or by hand where noted) copies of the Public Safety Wireless Network Program's Comments in response to the Second Report and Order and Further Notice of Proposed Rulemaking, *Spectrum Policy Task Force Seeks Public Comment on Issues Related to the Commission's Spectrum Policies*, the original of which is filed herewith and upon the parties identified on the attached service list.

DATED at Fair Oaks, Virginia this 8th day of July 2002.



Richard N. Allen

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